

## Exercise Week3

### 1. Leap Year or Common Year

Following rules are used to check if a A.D. year is a leap year or not.

- The year can be divided by 400 exactly.
- The year can be divided by 4 exactly and cannot be divided by 100 exactly.

Please write a C++ program to check if the integer inputted by user.

1. A four digits number (assuming all inputs are positive integers)
  - a. If not, please end the program immediately with a warning message “Wrong input!”
2. Is it a leap year?

```
1 %%shell
2
3 g++ W3solution.cpp -o W3solution
4 ./W3solution
```

Input a four digits AD year: 178  
Wrong input!

```
1 %%shell
2
3 g++ W3solution.cpp -o W3solution
4 ./W3solution
```

Input a four digits AD year: 1200  
Leap year

```
1 %%shell
2
3 g++ W3solution.cpp -o W3solution
4 ./W3solution
```

Input a four digits AD year: 1100  
Common year

```
1 %%shell
2
3 g++ W3solution.cpp -o W3solution
4 ./W3solution
```

Input a four digits AD year: 1612  
Leap year

Please name your .ipynb file as YourID\_Week3.ipynb and upload it to moodle system.  
(ex. H3700001\_Week3.ipynb)